



# POMEROY

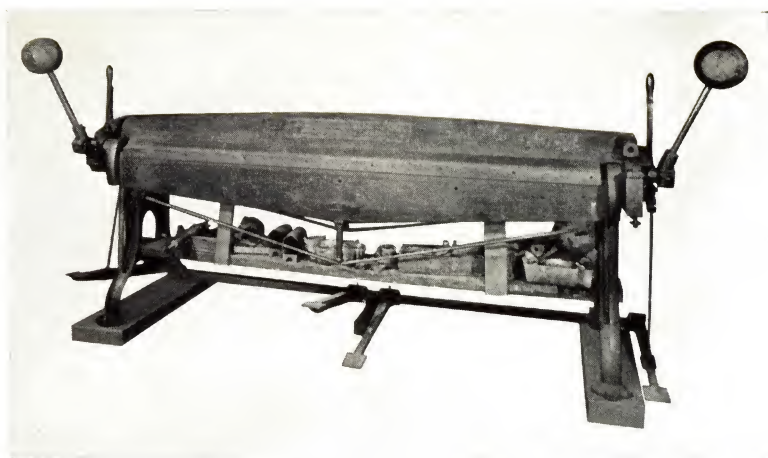
## ARCHITECTS' HANDBOOK OF DOUBLE-HUNG METAL WINDOWS

S. H. POMEROY CO., INC., NEW YORK



## *Since 1897*

... the days of manual hand brakes and foot presses, Pomeroy has pioneered and specialized in the manufacture of double hung metal windows . . . constantly developing and improving the essentials of good construction . . . and adopting, as rapidly as introduced, modern machines, equipment and processes.

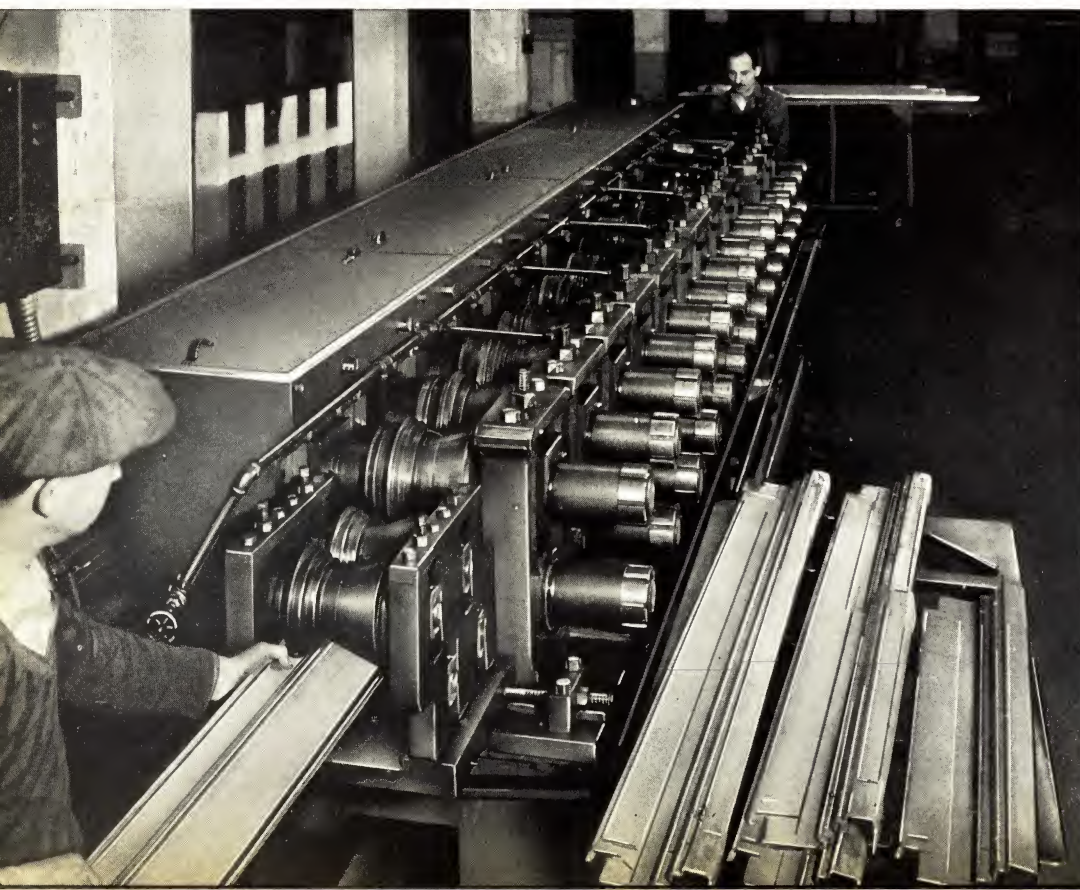


OLD FASHIONED HAND BRAKE

*Today* . . . in the midst of a machine era . . . Pomeroy has developed a matchless equipment of great rolling machines and automatic processes of every description . . . and now, with its forty-two years of experience, offers

### PRECISION BUILT, HEAVY METAL WINDOWS

... embodying, as permanent integral parts, all essentials of good construction.



EACH CONTACT MEMBER  
OF FRAME AND SASH IS  
ROLLED INTO FORMATION  
ON ITS OWN INDIVIDUAL  
MACHINE . . . TO ASSURE  
UNVARYING ACCURACY.

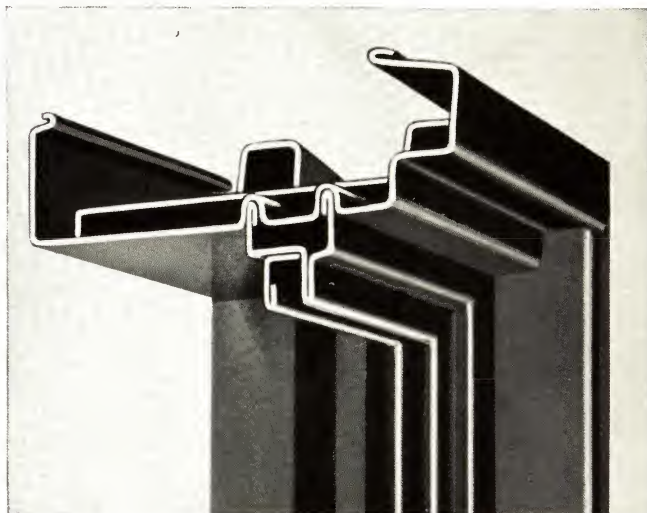


PICTURED HERE IS A ROLLING  
MACHINE FOR FORMING 12-  
GAUGE SILL.

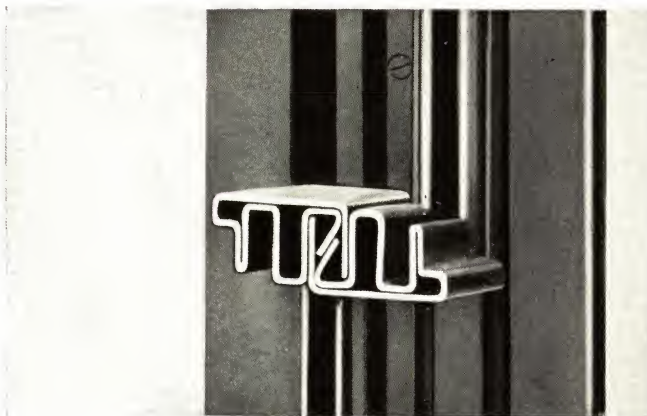


# IN *Pomerooy Windows* EVERY ESSENTIAL IS EMBODIED AS A PERMANENT INTEGRAL PART

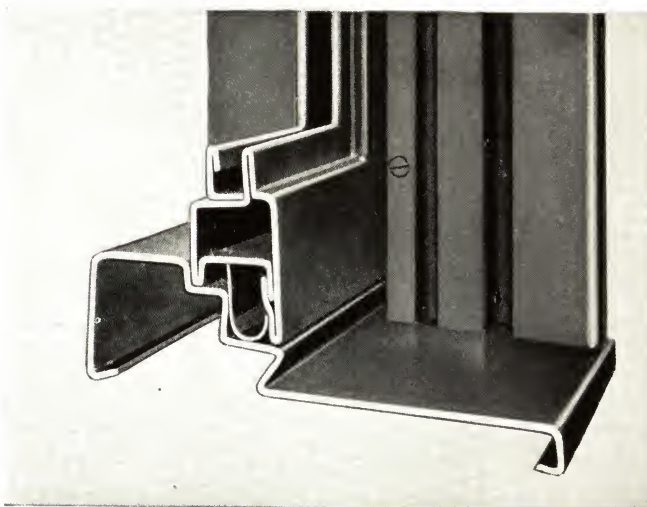
... Including EASE OF OPERATION • WEATHERTIGHTNESS • DESIGN  
REFINEMENT OF FINISH • DURABILITY



HEAD



MEETING RAILS



SILL

## *Outstanding Features*

### DOUBLE PERMANENT INTEGRAL WEATHERING

Test by Pittsburgh Testing Laboratory:

Less than one-half cubic foot of air infiltration per foot of sash perimeter when subjected to static air pressure equivalent to air pressure exerted by a wind twenty-five miles per hour.

### PERMANENT EASE OF OPERATION

Precision of rolling machines assures true and straight contact lines of unchanging, smooth rounded travelling surfaces.

### HEAVY TUBULAR SASH OF NARROW MOULDED LINES

The heavy metal tubular sections of sash—having slender lines and being flush welded at corners—present a slenderness and refinement of finish not hitherto obtainable.

### HOT DIPPED GALVANIZED COPPER-BEARING STEEL

Through the years we have had developed for our use a copper-bearing steel sheet, annealed especially soft and coated in the hot dipped manner in which the zinc does not become simply an outside coating, but is forced into the heat-opened pores of the metal itself. This produces a finish susceptible both to forming without cracking and to the ready adhesion of paint.

Thorough research has convinced us that for window work these sheets provide far greater rust resistance than the usual spangled galvanized sheet, or uncoated sheets electro-galvanized after fabrication . . . and that they possess paint adhesion qualities superior to coated or uncoated steel with chemically treated surfaces.

As for copper-bearing steel, Committee A-5 of the American Society for Testing Materials states: "We have now reached a point where we may definitely conclude that copper-bearing metal shows marked superiority in rust-resisting properties as compared to non-copper-bearing metal of substantially the same general composition — under atmospheric conditions."



# POMEROY "Superior Type" WINDOWS • Models "H", "I" and "L"

THE "Superior Type", designed by Pomeroy to meet recent architectural trends toward narrow lines, is the latest development in window construction and marks a tremendous advance in the double hung metal window industry. It is available in three models: "H", "I" and "L". All models are identical in design and construction, varying only in gauges of metal used. Gauges of members are shown in the chart.

## ADAPTABILITY

The design is adaptable to all types of buildings. The frame imposes no limitation on the design or treatment of interiors. Interiors may be either plain or moulded as desired. Venetian blinds, shades, rolling screens, special types of hardware, fastenings, etc. may be readily installed. The exterior face of the frame provides convenient surfaces to which screens, awnings and safety bolts may be attached. Special moulded staff beads may be supplied if desired.

## MULLIONS

Mullions are furnished in three widths,  $7\frac{3}{4}$ " , 5" and  $2\frac{1}{2}$ ". The exterior faces of the  $7\frac{3}{4}$ " and 5" mullions are recessed, whereas the  $2\frac{1}{2}$ " mullion is of flush design as are the interior faces of all three types. The  $2\frac{1}{2}$ " mullion which is of weightless design is available only for twin openings. The other two may be furnished for multiple openings of two or more units.

## MUNTINS

Sash may be single light or sub-divided by muntins. Arrangement of muntins may be as desired. Muntins for Underwriters labeled windows are  $1\frac{3}{4}$ " in width; for non-labeled windows 1" in width. Both types are of moulded design.

## GLAZING

Stiles and rails have inside glazing beads secured in place with concealed spring clips, eliminating the use of screws. Where muntins are used the interior muntin caps are removable—being held in place by oval head machine screws.

## TRANSOMS

Transoms may be fixed, hinged either at top or bottom or projected either in or out. Transom sections are similar to the double hung sections, carrying out the same architectural appearance.

## CURVED HEAD AND CIRCULAR WINDOWS

These architectural effects are obtainable in standard sections which blend with the design of the double hung window sections.

## DOUBLE GLAZING

The "Superior Type" Window may be adapted for double glazing. For further information see pages 8 and 9.

## SPRING BALANCED WINDOWS

The "Superior Type" is also available in our Models "U" and "B", the sash of which are operated with Unique Sash Balances. See pages 6 and 7 for further data.

## Specifications

Double Hung Windows shall be Model "H" (or Model "I" or Model "L") as manufactured by S. H. Pomeroy Co., Inc.

The window manufacturer shall furnish and erect complete all double hung windows including the installation of hardware and weights and final adjustment of sash.

Windows to be constructed throughout of tight coat hot dipped galvanized copper-bearing steel with members of frame and sash formed of the following gauges: (see gauge chart below).

Frame members shall be accurately formed, firmly interlocked and then welded.

Sash members shall be tubular in shape, of moulded design, flush welded at corners and ground smooth. The sash stiles shall have double flanges entering into and operating in deep weathering grooves of pulley stiles with integral weathering feature incorporated.

Sash shall be designed for inside glazing with metal glazing angles and muntin caps removable for glazing.

Pulleys shall be solid machined steel with special groove to keep chain in true line of travel. Sash shall be hung on American No. 130 sherardized steel sash chain and counter-weighted with cast iron weights.

Finished hardware shall be of solid bronze and consist of two lifts, one pole socket, one sash lock and one outside pulldown. (Special finished hardware shall be furnished where indicated.)

All members of frame and sash shall receive one shop coat of approved metallic priming paint before delivery to site.

Underwriters labeled windows shall be furnished where specified.

*Accessories, such as stools, window cleaner bolts, shade brackets, interior or exterior trim, etc. should be specifically mentioned if required to be furnished by window manufacturer.*

## GAUGES OF COMPONENT PARTS

Part	Heavy Steel Model "H"	Intermediate Steel Model "I"	Light Steel Model "L"
Head	16 gauge	16 gauge	18 gauge
Sill	12 gauge	14 gauge	14 gauge
Hanging Stile	12 gauge	12 gauge	18 gauge
Weight Box	16 gauge	20 gauge	18 gauge
Cross Rails	14 gauge	14 gauge	14 gauge
Sash Stiles	14 gauge	14 gauge	14 gauge

THESE MODELS MAY BE FURNISHED IN BRONZE, COPPER OR ALUMINUM • Specifications and information will be furnished upon request.

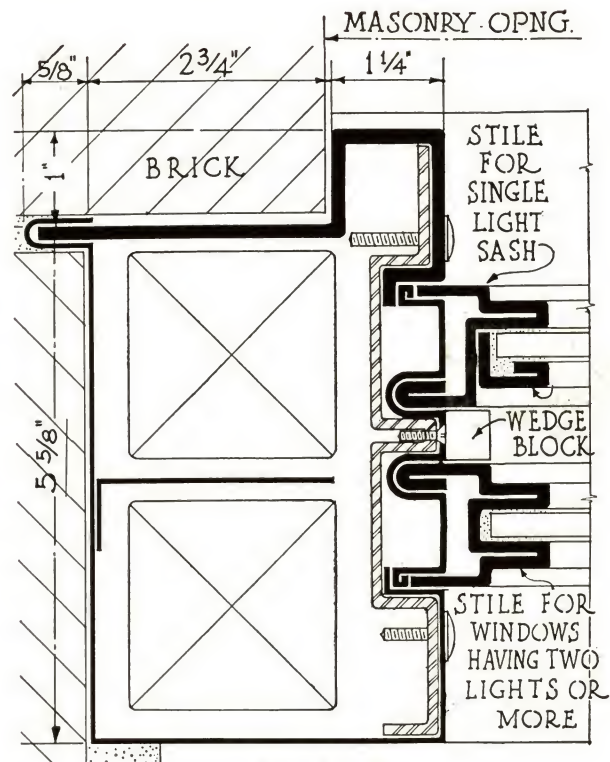
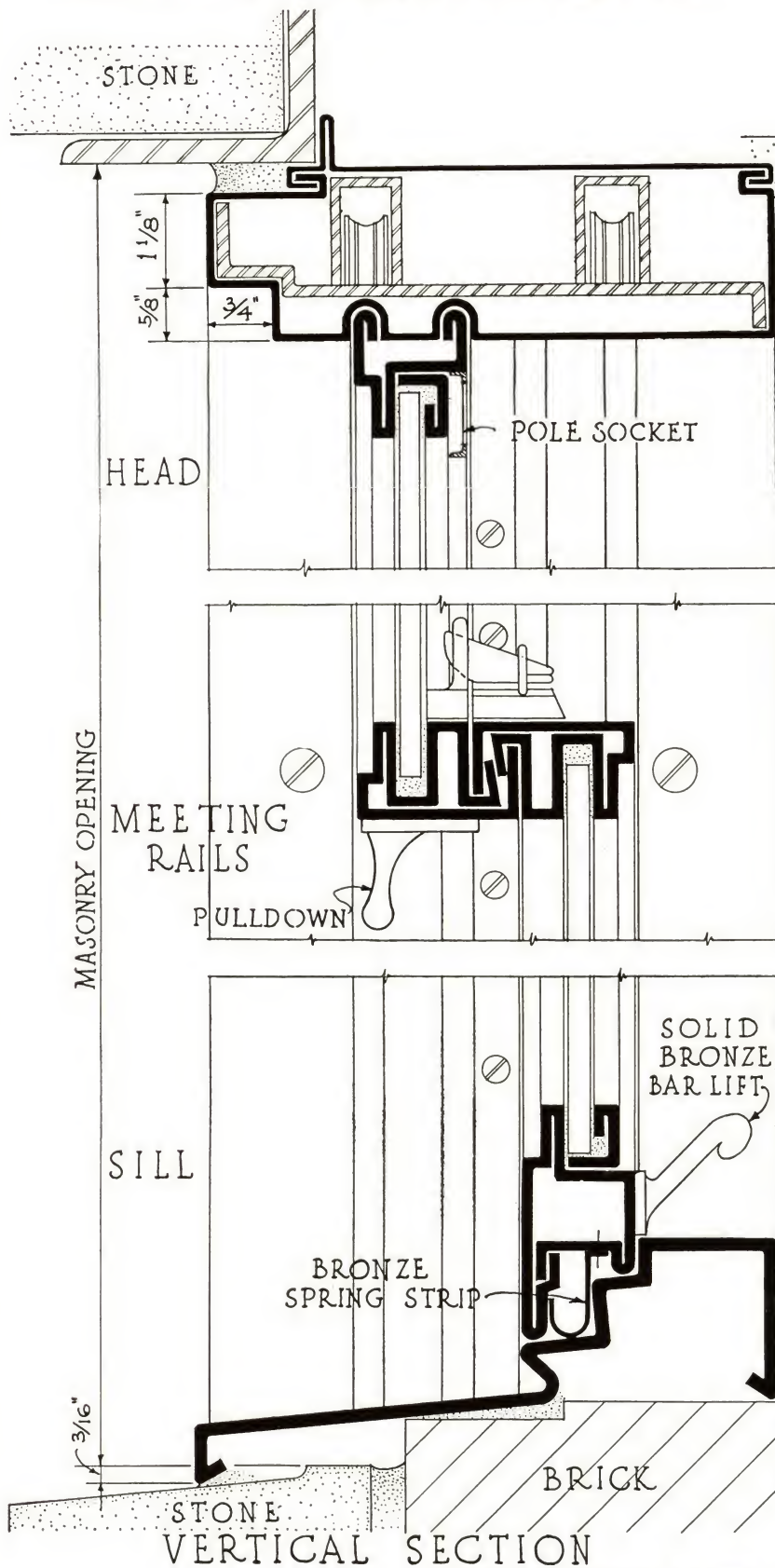


At right: UNITED STATES GOVERNMENT PRINTING OFFICE, Building Number 3, Washington, D. C.

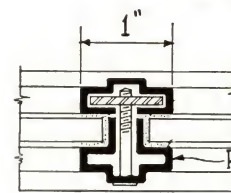


# DETAILS OF POMEROY "Superior Type" WINDOWS

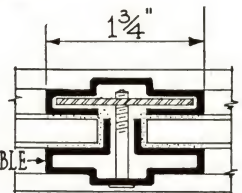
Models "H," "I" and "L" (For gauges, see chart on opposite page)



JAMB



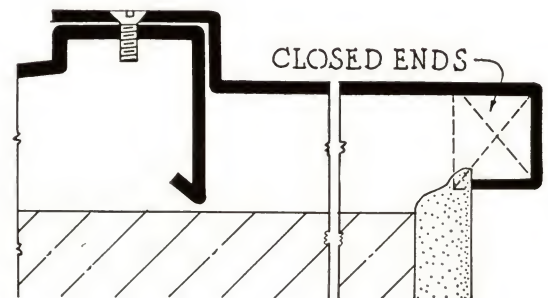
STANDARD



UNDERWRITERS

MUNTINS

HORIZONTAL SECTION



STOOL  
TYPE B

DETAILS SHOWN AT ONE HALF FULL SIZE



# POMEROY "Superior Type" WINDOWS • Models "U" and "B"

## OPERATED BY UNIQUE SASH BALANCES

**T**HE Models "U" and "B" are of the "Superior Type" constructed throughout of hot-dipped galvanized copper-bearing steel with sash designed for inside angle glazing and containing all other characteristics described on page 4.

In these two models the sash are operated by Unique Sash Balances. The balances requiring less space than sash weights and pulleys permit reduction in the size of frame

sections and simplify the frame construction and assembly. **This reflects itself in a substantial saving in material and labor costs without sacrifice of quality.**

Narrow mullions are furnished at no additional cost. The mullion width is  $2\frac{7}{8}$ " for multiple unit openings not exceeding 8'0" x 7'0" mason opening size and 4" for openings in excess of this size.

*Both Models can readily be adapted for detention purposes with the standard requirements of the detention type of window. (Complete detailed data on this subject will be sent upon request.)*

At left: APARTMENT, 965 Fifth Ave., New York City.  
Associated Architects: Russell M. Book and Irving Margon  
Builder: Kensington Estates, Inc.



## Specifications

Double Hung windows shall be Model "U" (or Model "B") as manufactured by S. H. Pomeroy Co., Inc.

The window manufacturer shall furnish and erect complete all double hung windows, including the installation of hardware and final adjustment of sash balances and sash.

Windows to be constructed throughout of tight coat hot-dipped galvanized copper-bearing steel, with members of frame and sash formed of the following gauges: (see gauge chart below).

Frame members shall be accurately formed, firmly interlocked and bolted to their respective intersecting parts.

Sash members shall be tubular in shape, of moulded design, flush welded at corners and ground smooth. Sash stiles shall have double flanges entering into and operating in deep weathering grooves of pulley stiles, with integral weathering feature incorporated.

Sash shall be designed for inside glazing with metal glazing angles and muntin caps removable for glazing.

The sash shall be operated by Unique Sash Balances concealed within jamb boxes.

Finished hardware shall be of solid bronze and consist of two lifts, one sash lock, one pole socket and one outside pulldown. (Special finished hardware where indicated.)

All members of frame and sash shall receive one shop coat of approved metallic priming paint before delivery to site.

*Accessories such as stools, window cleaner bolts, shade brackets, interior or exterior trim, etc. should be specifically mentioned if required to be furnished by window manufacturer.*

GAUGES OF COMPONENT PARTS

Part	Model "B"	Model "U"
Head	16 gauge	18 gauge
Sill	12 gauge	14 gauge
Hanging Stile	12 gauge	18 gauge
Weight Box	18 gauge	18 gauge
Cross Rails	14 gauge	14 gauge
Sash Stiles	14 gauge	14 gauge
Muntins	18 gauge	18 gauge

**THE UNIQUE SASH BALANCE** functions as a perfect balancing device, complete within itself and maintains a true balance at any point in the run of the sash. It is not a holding or friction device. It utilizes a basic mechanical principle which assures the constant and everlasting flow of power back and forth between the balance and the sash just as surely as the ebb and flow of tide.

This basic principle is two-fold — CREATION AND CONTROL OF POWER. The power is created in the spring by the revolving of the bushing at its lower end around the spiral rod and the power thus created is controlled by the changing pitch of the turns of the spiral rod.

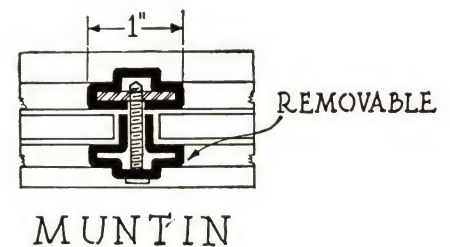
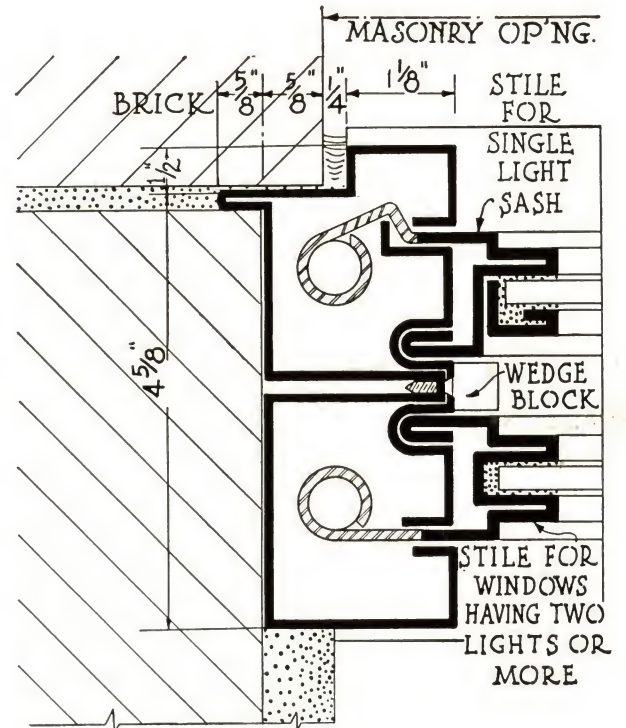
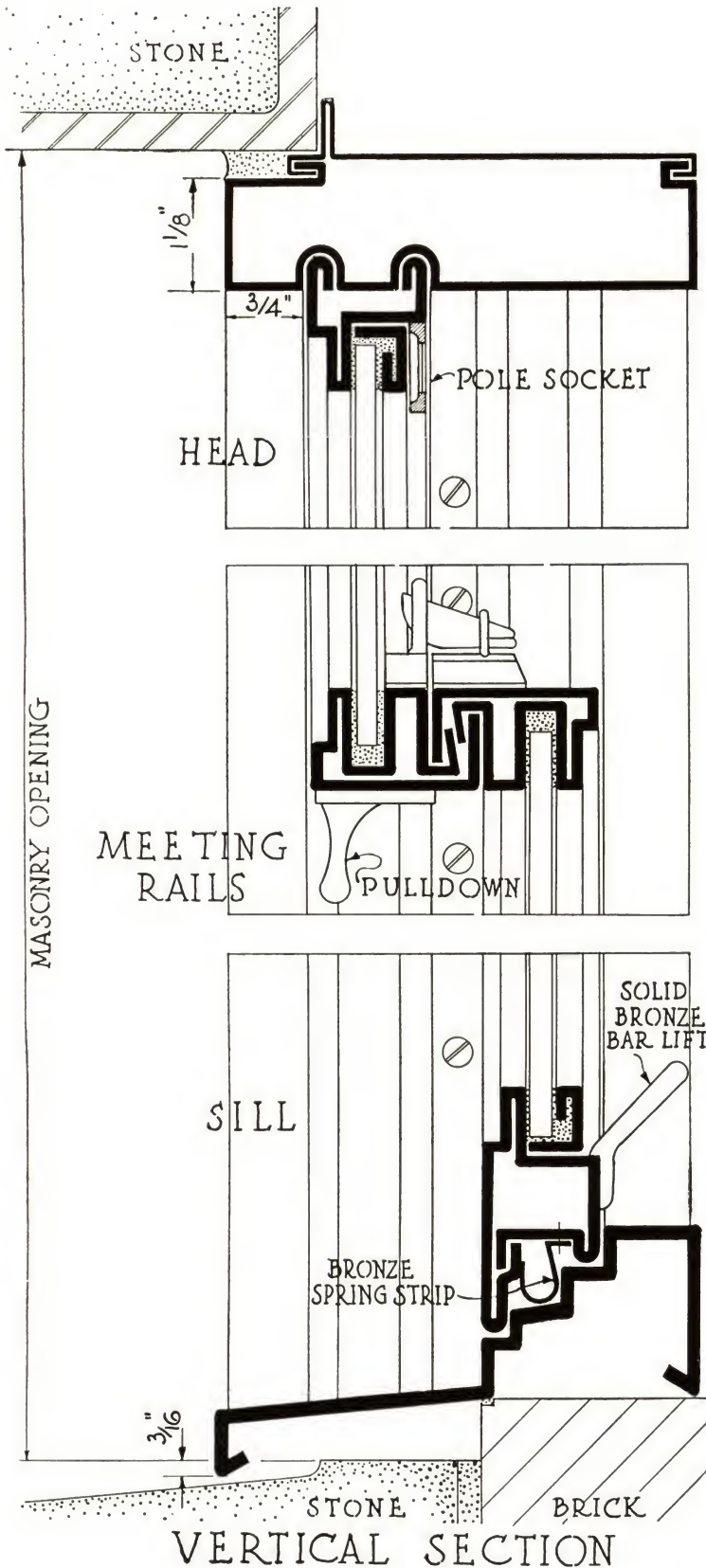
In other words, as additional lifting power is created in the spring by the revolving of the bushing, this additional lifting power is absorbed in the added work required of the spring to lift the sash up the steeper pitch of the rod. The power created in the spring is synchronized with the pitch of the twisted accelerated rod with the result that A PERFECT BALANCE of power is created between the two at any point. A glance at the photographs at the bottom of page will illustrate the principles involved and described above. **The tremendous lifting power of Heavy Duty Unique Sash Balances — equal to one hundred pounds each sash or two hundred pounds per window — makes the window size range practically unlimited.**



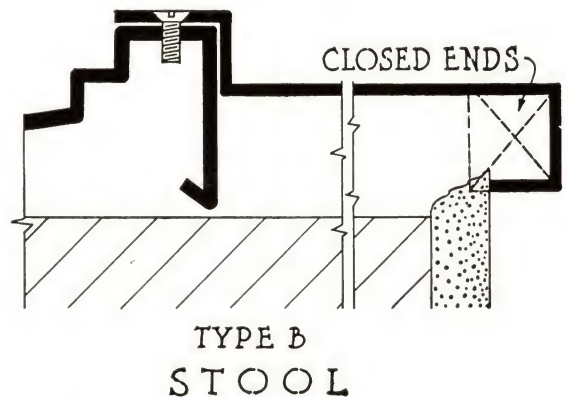


# DETAILS OF POMEROY *"Superior Type"* WINDOWS

Models "U" and "B" (For gauges, see chart on opposite page)



## HORIZONTAL SECTION



DETAILS SHOWN AT ONE HALF FULL SIZE

# POMEROY "Superior Type" WINDOWS • Double Glazed

Models "H," "I" and "L"

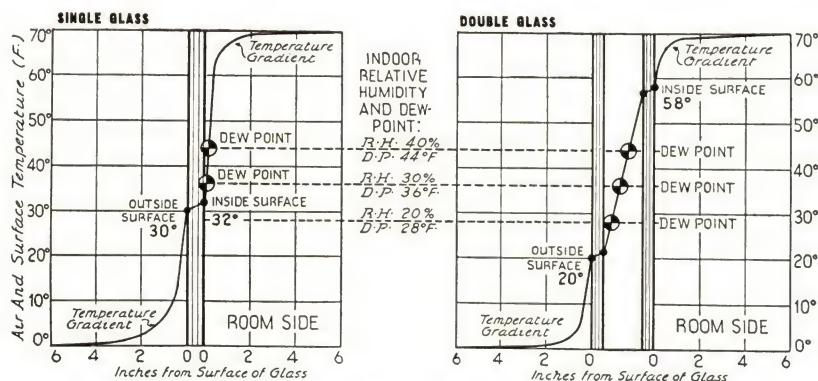
THE double glazing feature is available in Models "H," "I" and "L"—and, in adapting this feature to these models, we have maintained all of the characteristics described on page 4.

Tests have shown that at design temperatures (0° F. outside and 70° F. inside) the inside of a sheet of window glass has about the same effect on a heated room as would a piece of ice of the same area. As the outdoor temperature approaches zero, the inside surface of exposed glass goes down to freezing. With double glass separated by an air space, the temperature of the inner glass is raised to about 60° F.

The saving in fuel costs by double glazing is further enhanced by the saving in the initial cost of the heating plant which can be designed for the reduced load resulting from glass insulation.

## AIR SPACE THICKNESS

Heat is transmitted through an air space by radiation, conduction and convection. The amount transmitted by radiation depends on the nature and temperatures of the bounding surfaces, is independent of the thickness of the space. With "dead" air, the amount transmitted by conduction goes down as the thickness of the space is increased. The amount of heat transmitted by convection, on the other hand, increases as the thickness of the space is increased—owing to the increased tendency of the air to circulate. As an air space is increased in thickness, the decrease in the amount of heat transmitted by conduction is greater than the increase in the amount transmitted by convection but in decreasing proportion—so that the insulating effect of a vertical air space increases sharply between 0 and .25 inches, gradually between .25 and .7 inches, and thereafter only very slightly.



The above graphs show temperature gradients for single and double glazing—based on tests by A.S.H.V.E. Research Laboratory. Curves show that double glass raises inside surface temperature to 58° F., well above room dewpoint, thus preventing condensation.

Glass insulation data by Courtesy of The Architectural Forum.

## Specifications • DOUBLE GLAZED

Double hung windows shall be Model "H" (or "I" or "L") as manufactured by S. H. Pomeroy Co., Inc., with sash designed for double glazing.

The window manufacturer shall furnish and erect complete all double hung windows including the installation of hardware and weights and final adjustment of sash.

Windows to be constructed throughout of tight coat hot-dipped galvanized copper-bearing steel, with members of frame and sash formed of the following gauges:

Head	} See gauge chart on page 4.
Sill	
Hanging Stile	
Weight Boxes	
Cross Rails	
Sash Stiles	

Frame members shall be accurately formed, firmly interlocked and then welded.

Sash members shall be tubular in shape, of moulded design, flush welded at corners and ground smooth.

Sash stiles shall have double flanges entering into and operating in deep weathering grooves of pulley stiles, with integral weathering feature incorporated.

Each inside glass frame shall be made removable and shall ride on a formed section attached to the bottom rail of sash so that it may be tilted inward at the top to approximately 25° to give access for cleaning of glass. When closed the inside glass frame shall be sealed by a felt gasket for its entire perimeter and shall be held in place by two small key locks located at upper corners of sash stiles.

Pulleys shall be solid machined steel with special groove to keep chain in true line of travel. Sash shall be hung on American No. 130 sherardized steel sash chain and counterweighted with cast iron weights.

Finished hardware shall be of solid bronze and consist of two lifts and one sash lock. (Special finished hardware shall be furnished where indicated).

Muntins may be furnished for outer glass lights if desired.

Accessories, such as stools, window cleaner bolts, shade brackets, interior or exterior trim, etc. should be specifically mentioned if required to be furnished by window manufacturer.

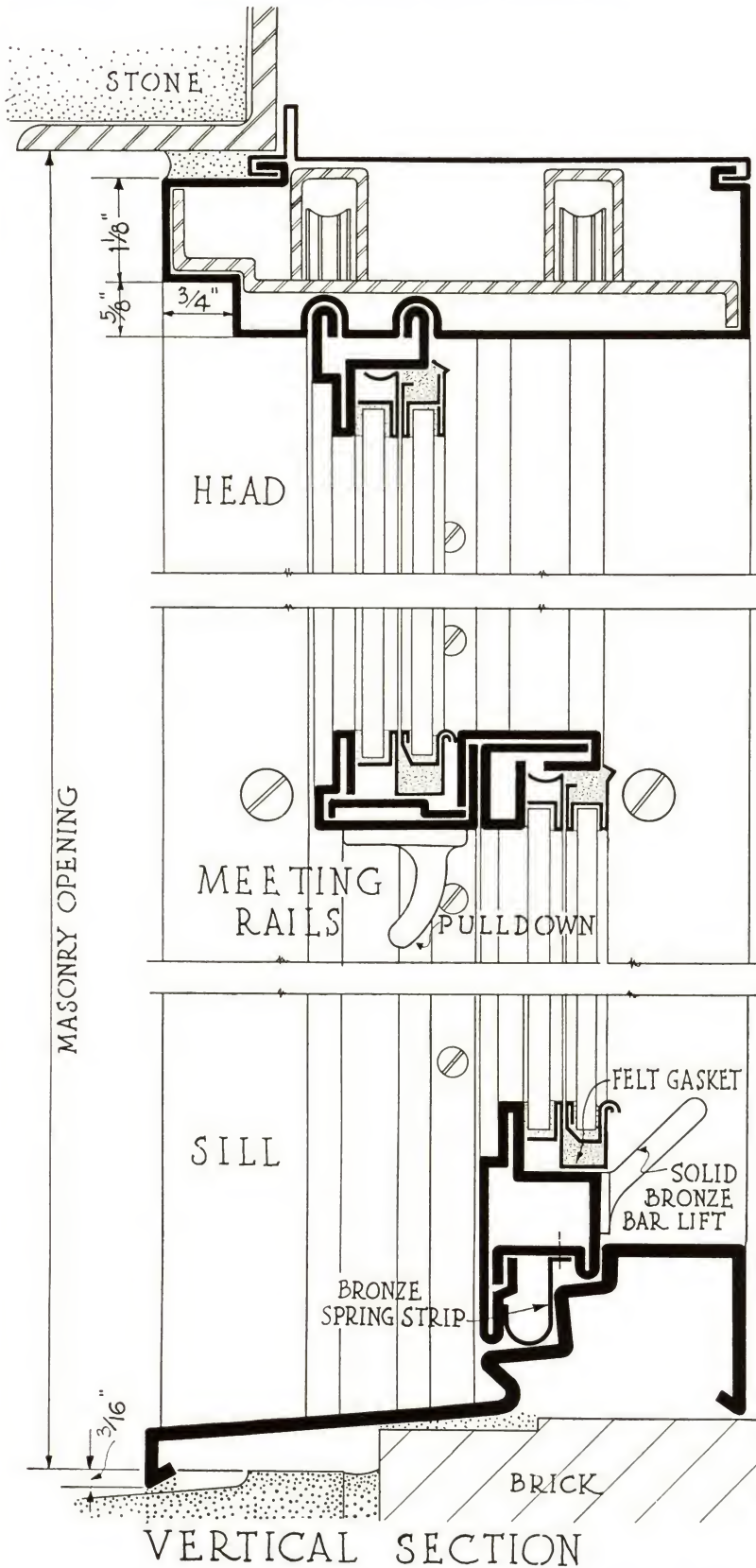
ADMINISTRATION BUILDING,  
Quabbin Reservoir, Belchertown, Mass.





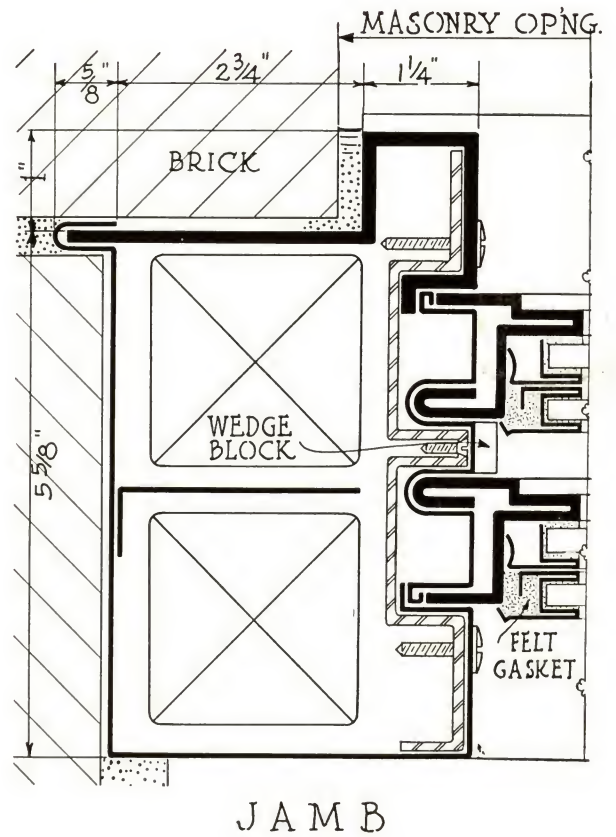
# DETAILS OF POMEROY "Superior Type" WINDOWS • DOUBLE GLAZED

Models "H," "I" and "L" (For gauges, see chart on page 4)

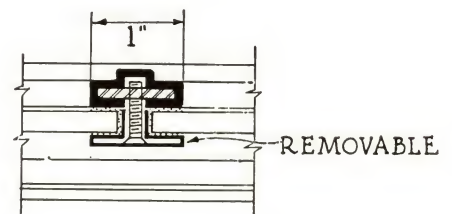


VERTICAL SECTION

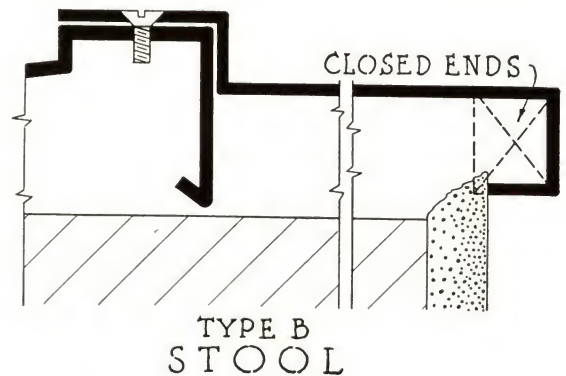
DETAILS SHOWN AT ONE HALF FULL SIZE



JAMB



MUNTIN  
HORIZONTAL SECTION



TYPE B  
STOOL



# POMEROY "Standard Type" WINDOWS

THE "Standard Type" Window embodies those basic essentials of window construction distinctive of Pomeroy Windows and is designed to meet certain architectural requirements. The broad, deeply moulded members of sash closely resemble in appearance the lines of a moulded wood sash.

The rails and stiles of sash are constructed of one piece of metal, forming tubular moulded sections, which are rigidly assembled by a specially devised lapping and interlocking procedure, supplemented by a welding process.

The members of the frame, exclusive of parting and closure strips, likewise are formed of one piece of metal and assembled in the same manner as the sash members.

In designing the members of frame and sash and the method of assembling, careful thought was given to the Pomeroy features of Integral Weathering and ease of operation. It is interesting to note from the details on opposite page how effectively these two outstanding Pomeroy features have been built into this window construction.

## Specifications

Double Hung windows shall be Model "M" as manufactured by S. H. Pomeroy Co., Inc.

The window manufacturer shall furnish and erect complete all double hung metal windows including the installation of hardware and weights and final adjustment of sash.

Windows shall be constructed throughout of tight-coat hot-dipped galvanized copper-bearing steel with members of frame and sash formed of the following gauges:

Head: 18 gauge  
Sill: 14 gauge  
Jamb: Box 20 gauge  
Cross Rails: 20 gauge  
Sash Stiles: 18 gauge

Frame members shall be accurately formed, firmly interlocked and then welded. Sash members shall be of moulded design, the sash stiles and rails constructed of one piece of metal neatly mitered, lapped and interlocked. Sash stiles shall have double flanges entering into and operating in deep weathering grooves of pulley stiles with integral weathering feature incorporated.

Sash shall be designed for inside glazing with metal glazing angles and muntin caps removable for glazing.

Pulleys shall be solid machined steel with special groove to keep chain in true line of travel. Sash shall be hung on American No. 130 sherardized steel sash chain and counterweighted with cast iron weights.

Finished hardware shall be of solid bronze and consist of two lifts, one pole socket, one sash lock and one outside pulldown. (Special finished hardware shall be furnished where indicated.)

All members of frame and sash shall receive one shop coat of approved metallic priming paint before delivery to site.

Underwriter's labeled windows shall be furnished where specified.

*Accessories, such as stools, window cleaner bolts, shade brackets, interior or exterior trim, etc. should be specifically mentioned if required to be furnished by window manufacturer.*



*At left:*

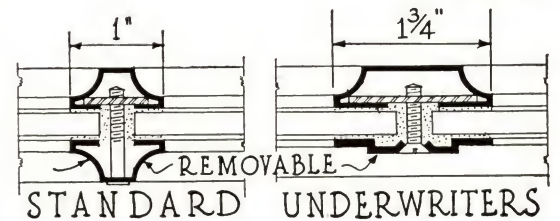
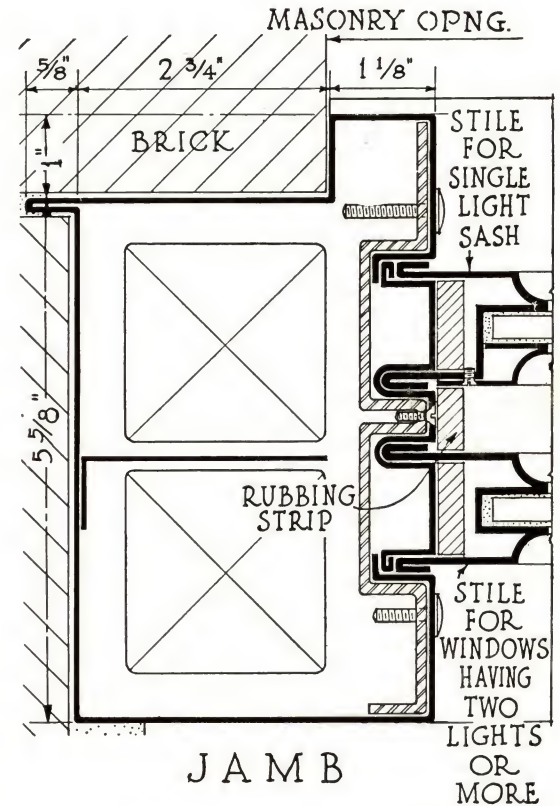
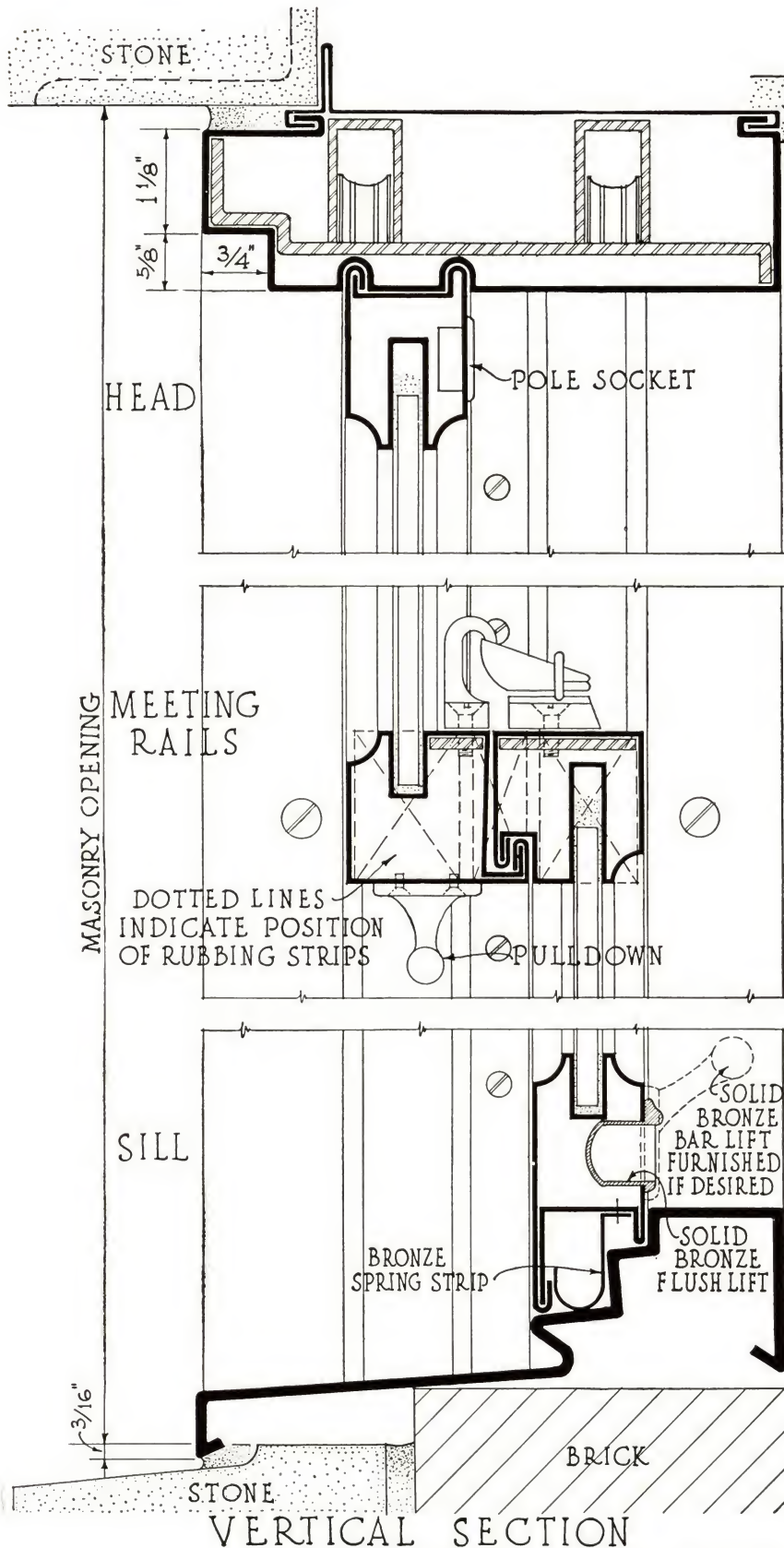
RIVER HOUSE, 52nd Street and East River, New York City  
Bottomley, Wagner & White, Architects  
James Stewart & Co., Inc., Builders



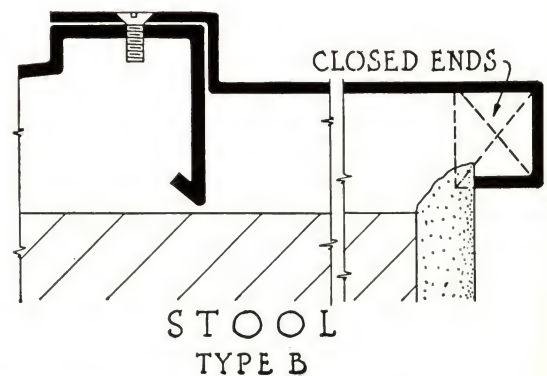


# DETAILS OF POMEROY "Standard Type" WINDOWS

(For gauges, see opposite page)



## MUNTINS HORIZONTAL SECTION



DETAILS SHOWN AT ONE HALF FULL SIZE.



# POMEROY *Representatives*

## ALABAMA

BIRMINGHAM, Builders Supply Co., 3025 6th Ave., So.

## ARKANSAS

LITTLE ROCK, Wherry & Co., 711 Rector St.

## CALIFORNIA

LOS ANGELES, Felix Krueper & Co., 535 S. Clarence St.  
SAN FRANCISCO, Forderer Cornice Works, 269 Potrero St.

## COLORADO

DENVER, E. E. Sarchet, 2025 York St.

## CONNECTICUT

NEW HAVEN, E. M. Stephens, 40 Wall St.

## DELAWARE

WILMINGTON, Savery & Cooke, Inc., 410 N. DuPont St.

## DISTRICT OF COLUMBIA

WASHINGTON, William S. Graham, 1612 K St., N. W.

## FLORIDA

JACKSONVILLE, Builders Products Co., 204 E. 8th St.  
MIAMI, Paul E. Shipe, 1750 N. Miami Ave.  
SARASOTA, W. L. Van Dame.  
TAMPA, Builders Service Co., 420 Stovall Professional Bldg.  
WEST PALM BEACH, Southern Metal Products, Inc.,  
Roseland Drive and Henry Ave.

## GEORGIA

ATLANTA, L. E. Murray, 161 Spring St., N. W.

## ILLINOIS

CHICAGO, W. L. Van Dame Co., 820 N. Michigan Ave.

## INDIANA

INDIANAPOLIS, Hugh J. Baker, 602 W. McCarty St.

## IOWA

DES MOINES, Perkins Supply Co., 10th and Vine Sts.  
WATERLOO, C. M. Berkley Co., 302 W. 4th St.

## KENTUCKY

LEXINGTON, Milton Young, P. O. Box 932  
LOUISVILLE, Clarence H. Stinson, 318 Tyler Bldg.

## LOUISIANA

NEW ORLEANS, J. T. Mann & Co., 937 Gravier St.

## MASSACHUSETTS

BOSTON, Skillman & Sunderland Co., 1042 Little Bldg.

## MICHIGAN

DETROIT, Robbie Robinson Co., 226 Murphy Bldg.

## MINNESOTA

MINNEAPOLIS, Hauenstein & Burmeister, Inc., 614 Third Ave.  
ST. PAUL, Hauenstein & Burmeister, Inc., 707 Minnesota Mutual Bldg.  
DULUTH, Duluth Builders Supply Co., 304 Builders Exchange Bldg.

## MISSOURI

KANSAS CITY, S. W. B. Howard, 5012 Grand Ave.  
ST. LOUIS, W. E. Way, 825 Chemical Bldg.

## NEW JERSEY

ATLANTIC CITY, Desney & Co., 3540 Atlantic Ave.  
TRENTON, R. W. Davis, 21 Muirhead Ave.

## NEW YORK

ALBANY, Harding Building Specialties Co., 271 Washington Ave.  
ROCHESTER, S. A. Spencer, 135 Spring St.  
SYRACUSE, B. R. Johnson, 145 Harding Place  
UTICA, American Hard Wall Plaster Co.

## NORTH CAROLINA

CHARLOTTE, W. Fred Casey & Co., 510 W. 4th St.

## OHIO

CANTON, O. J. Weigand, 611 Ingram Ave., S. W.  
CINCINNATI, Al Levinson Co., 802 Times Star Tower Bldg.  
DAYTON, G. H. Condit, 712 Gas & Electric Bldg.

## OKLAHOMA

OKLAHOMA CITY, Town-Sco Equip. Co., 211 W. 10th St.  
TULSA, Murray R. Womble Co., 316 Atco Bldg.

## OREGON

PORTLAND, McCracken-Ripley Co., 2221 N. Albina Ave.

## PENNSYLVANIA

ALLENTOWN, Morris Black, 3rd and Union Sts.  
BETHLEHEM, Morris Black, 215 Vineyard St.  
ERIE, George H. Kraft & Son, 602 Shenley Drive  
HARRISBURG, R. S. Baumgardner, 201 N. 30th St.  
PHILADELPHIA, Eberle & White, Inc., 1108 Franklin Trust Bldg.  
PITTSBURGH, Scott & Haigh, Grant Bldg.  
READING, J. H. Cooper, P. O. Box 415  
SCRANTON, Harvey R. Allen, 711 Linden St.  
WILKES-BARRE, William H. Pierce, 402 Bennett Bldg.

## RHODE ISLAND

PROVIDENCE, Stel-Wod Engineering Co., 66 Orange St.

## SOUTH CAROLINA

GREENVILLE, J. Mac Rabb, P. O. Box 144

## TENNESSEE

NASHVILLE, John Williams Co., 1207 Warner Bldg.

## TEXAS

AMARILLO, Forrest R. Barnes, P. O. Box 1704  
DALLAS, Carter Harrison, 2200 Cedar Spring Ave.  
HOUSTON, Buie-Lunsford Co., 704 M & M Bldg.  
SAN ANTONIO, John A. Williamson, 804 Avenue A  
WICHITA FALLS, West Texas Eng. & Supply Co.

## UTAH

SALT LAKE CITY, Associated Specialties Co.,  
204 Interurban Depot Bldg.

## VIRGINIA

NORFOLK, Hall Hodges Co., 813 Citizens Bank Bldg.  
RICHMOND, Virginia Equip. & Supply Co., 210 E. Franklin St.  
ROANOKE, G. Eric Sachers, P. O. Box 1885

## WASHINGTON

SEATTLE, Teurtellotte-Bradley Co., White Bldg.

## WEST VIRGINIA

CHARLESTON, Fireproof Products Co., Professional Bldg.

## WISCONSIN

MILWAUKEE, C. C. Banholzer, 728 N. Jefferson St.

## PHILIPPINE ISLANDS

MANILA, Norton & Harrison Co., P. O. Box 782

# S. H. POMEROY CO., INC.

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